

REMARKS

Applicant has carefully reviewed the Application in light of the Office Action mailed November 24, 2003. Claims 1-36 are pending and stand rejected. Claims 37-39 are allowed. Applicant has amended Claims 1, 6-11, 13, 18-23, 25, 27-29, 31, 32, 34, and 35. Applicant submits that no new matter has been introduced by these amendments. Applicant respectfully requests reconsideration and favorable action in this case. Applicant submits that the pending claims are patentably distinguishable over the cited reference.

Section 103 Rejections

The Office Action has rejected Claims 1-3, 7, 9, 13-16, 19, 21, 25-28, 31 and 33 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,216,006 to Scholefield, et al. ("Scholefield") in view of U.S. Patent No. 6,606,311 to Wang, et al. ("Wang"). The Office Action also has rejected Claims 4-6, 17-18, and 29-30 under 35 U.S.C. § 103(a) as being unpatentable over *Scholefield* and *Wang*, and further in view of U.S. Patent No. 6,407,999 to Olkkonen, et al. ("Olkkonen"). Furthermore, the Office Action has rejected Claims 8, 10-12, 20, 22-24, 32 and 34-36 under 35 U.S.C. § 103(a) as being unpatentable over *Scholefield* and *Wang*, and further in view of U.S. Patent No. 5,884,174 to Nagarajan, et al. ("Nagarajan"). Applicants traverse all rejections and all assertions therein.

Scholefield discloses a method for determining whether a wireless data network has enough surplus capacity to grant a service request. Abstract. In particular, a base station receives a service request from a mobile station in a wireless data network. *Id.*, The base station executes a recursive estimator to determine if there is enough surplus capacity on the wireless data network to accomodate the service request. *Id.* If so, the base station grants the new serive request. *Id.*

Wang discloses providing pre-defined Quality of Service (QoS) to a wireless IP data traffic flow. Col. 2, Lines 63-64. In particular, QoS parameters are defined and stored within a base station along with profiles associated with each customer that accesses the system. Col. 4, Lines 32-34. Based upon the identity of the packet, the proper pre-defined QoS is applied to that flow. Col. 4, Lines 34-36.

Olkonen disclose a method for packet prioritization when routing data is present based on thresholds associated with a maximum queued time. Abstract. Based on the packet violating this threshold, the queued packet is discarded. *Id.*

Nagarajan discloses a method of reserving channels for handoffs in a wireless network to minimize termination of calls during handoffs. Abstract. In particular, the system effectively reserves a non-integral number of guard channels by rejecting new calls in accordance with a probability value that is dependent upon the current channel occupancy. *Id.*

In order to establish a *prima facie* case of obviousness, three requirements must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge available to one skilled in the art, to modify a reference or combine multiple references; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or combination of references) must teach or suggest all of the claim limitations. M.P.E.P. § 2143. In the present case, a *prima facie* case of obviousness cannot be maintained for at least two reasons. First, neither *Schollefield*, *Wang*, *Olkonen*, nor *Nagarajan* provides a suggestion or motivation to combine the references. Second, even assuming for the sake of argument that the references did suggest or motivate a combination of the references to a person of ordinary skill in the art at the time of the invention, *Schollefield*, *Wang*, *Olkonen*, and *Nagarajan*, whether considered singly, in combination with one another, or in combination with information generally available to those of ordinary skill in the art at the time of the invention, still fail to disclose all of the elements of the pending claims.

A. No Motivation or Suggestion to Combine *Cupps, Harrington, Hanson, and Cotter*

The M.P.E.P. sets forth a strict legal standard for finding obviousness based on a combination of references. According to the M.P.E.P., “Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge [that was] generally available to one of ordinary skill in the art” at the time of the invention. M.P.E.P. 2143.01. The “fact that

references can be combined or modified does not render the resultant combination [or modification] obvious unless the prior art also suggests the desirability of the combination" or modification. *Id.* (emphasis in original).

The governing Federal Circuit case law makes this strict legal standard even more clear.¹ According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine . . . prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembicza*k, 175 F.3d 994, 999 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* In *In re Dembicza*k, the Federal Circuit reversed a finding of obviousness by the Board of Patent Appeals and Interferences, explaining that proper evidence of a teaching, suggestion, or motivation to combine is essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999 (quoting *W.L. Gore & Assoc., Inv. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983)) (emphasis added) (citations omitted).²

In the present case, the Examiner is improperly using the Applicant's disclosure as a blueprint for piecing together various elements of *Scholefield, Wang, Olkkonen*, and

¹ Note M.P.E.P. 2145(X)(C) ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

² See also *In Re Jones*, 958 F.2d 347, 351 (Fed. Cir. 1992) ("Conspicuously missing from this record is any evidence, other than the PTO's speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at" the claimed invention.).

Nagarajanr. For example, the Examiner merely asserts that it would have been obvious "to include determining a priority associated with the connection in order to provide qualitative QoS parameters in a wireless network." Office Action, pages 3, 4, and 6. However, nowhere does *Scholefield* disclose, teach, or suggest a need for "determining a priority associated with the connection in order to provide qualitative QoS parameters in a wireless network." In fact, *Scholefield* teaches determining whether there is any un-used bandwidth available to satisfy a new service request in a cellular network. Col. 3, Lines 9-57. Nothing in *Scholefield* motivates or suggests the need for "determining a priority associated with the connection based on the subscription level information," as recited by Claim 1. In addition, *Wang* merely discloses making "available a plurality of defined QoS classes [for IP data traffic flow] to a CDMA user." Col. 2, Lines 65-67. In particular, a IP QoS Adaptation Sublayer (QAS) 206 directs packets 202 to a pre-defined QoS level based on a user profile. Col. 4, Lines 25-34. Nothing in *Wang* motivates or suggests the use of the IP QoS Adaptation Sublayer (QAS) 206 with any other use, much less for the use of prioritizing bandwidth request in a cellular network based on subscription level information in a request. Thus, the suggestion or motivation required by M.P.E.P. § 2143.01 for the proposed combination of *Scholefield* and *Wang* does not exist, and the Examiner has failed to identify the source of such suggestion or motivation.

Furthermore, modifying *Scholefield* as suggested by the Examiner would change the principle of operation of the bandwidth management system disclose in *Scholefield* and render key features useless or inoperable. If a "proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." M.P.E.P. §2143.01. The principle of operation of the bandwidth management system in *Scholefield* is to determine if the cellular network has un-used bandwidth available to a new service request. (See FIGURE 1). The determination is based solely on the availability of bandwidth, not priority associated with a connection based on subscription level information, as claimed. The design, construction, and use of the bandwidth monitoring system as disclosed in *Scholefield* that could be used with the QoS system disclosed in *Wang* would require a substantial reconstruction and redesign of the elements in *Scholefield*. The base station disclosed in *Scholefield* would have to be redesigned to perform the IP QoS

assignment functions disclosed in *Wang*. This redesign would require that the admission request function currently disclosed in *Scholefield* be deleted and the base station disclosed in *Scholefield* would have to be modified to store user profiles, provide separate queues for pre-defined QoS levels, and process received packets in accordance with the stored user profiles.

Consequently, a *prima facie* case of obviousness cannot be maintained with respect to Claims 1-36, as the Examiner has not shown the requisite proof necessary to establish a suggestion or motivation to combine the cited references. For at least this reason, Applicant respectfully requests reconsideration and allowance of Claims 1-36.

B. The Cited References Fail to Disclose, Teach, or Suggest Each and Every Element of Claims 1-37

Even assuming for the sake of argument that the cited references did suggest or motivate a combination of the references to a person of ordinary skill in the art at the time of the invention, *Scholefield*, *Wang*, *Olkkinen*, and *Nagarajan*, whether considered singly, in combination with one another, or in combination with information generally available to those of ordinary skill in the art at the time of the invention, would still fail to disclose each and every element of Claims 1-36.

For example, Independent Claim 1, as amended, recites, "receiving a bandwidth request for a connection to a cell of a wireless network, the received request comprising a call admission request, an additional bandwidth request, or a handoff request, the received request including subscription level information." Applicants submit that this element at least is not taught or suggested by *Scholefield* or *Wang*. For example, neither *Scholefield* nor *Wang* teach "the received request including subscription level information." Accordingly, the Applicants respectfully request allowance of Independent Claim 1 and its respective dependents Claims 2-5.

Independent Claims 6, 13, 18, and 25 are allowable for analogous reasons. Claims 7-12 each depend from independent Claim 6 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 6. Claim 14-17 each depend from

independent Claim 13 and are thus patentable over the cited art, for example, for at least the reasons discussed above with regard to Claim 13. Claims 19-24 each depend from independent Claims 18 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 18. Claims 26-36 each depend from independent Claim 25 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 25. Applicants respectfully request reconsideration and allowance of these claims.

CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicant respectfully requests full allowance of all the pending claims.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicant hereby requests a telephone conference with the Examiner and further request that the Examiner contact the undersigned attorney to schedule the telephone conference.

Although Applicant believes no fees are due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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